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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/473,080	12/28/1999	TOSHIHIRO SUGIURA	ADACHI-P181U	9575

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EXAMINER

NALEVANKO, CHRISTOPHER R

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 02/25/2004

19

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/473,080

Applicant(s)

SUGIURA ET AL.

Examiner

Christopher R Nalevanko

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 4-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/12/04 has been entered.

### ***Response to Arguments***

1. Applicant's arguments filed 01/12/04 have been fully considered but they are not persuasive. Applicant argues, "In fundamental contrast from Stern et al, however, the system of the present invention transmits command signals that are separate from and distinguished from the power signals to the districts" (page 7 lines 2-4). All that is claimed in the limitations is control signals for controlling the distribution of broadcast signals. Stern shows control signals that control the distribution of broadcast signals that meet this limitation (col. 3 lines 5-13).
2. Applicant's arguments filed 1/12/04 have been fully considered but they are not persuasive. Applicant argues, "In fundamental contrast from the teachings of Stern et al, the present invention specifically addresses and provides solutions to issues of power supply adequacy arising from the number of concurrent or consecutive command signals directing concurrent or consecutive tap switching operations. For this reason, therefore

the system of Stern et al cannot and does not teach or even suggest that command signals should be issued on a per district basis, or that consecutive command signals should not be issued to a given district..." (page 7 lines 14-22). Nowhere in the claimed limitations is there any specific reference to power consumption at a district. Therefore, in assessing the patentability of the spacing of signals down to the district, this limitation does not need to be considered. Furthermore, Stern shows that commands to the individual power units (fig. 1a item 2) are sent down serially, or successively. This means that successive commands are sent to different districts. After the command is received by the power unit, the commands to the individual taps are sent down in parallel (col. 6 lines 1-21). Since not specifically stated, Stern does not need to mention power consumption, only that the signals are transmitted to different districts for any reason.

3. Applicant's arguments filed 1/12/04 have been fully considered but they are not persuasive. Applicant argues that, "as discussed above and as essentially admitted by the Examiner in the following rejection of claim 5 under 35 USC 103 over Stern in further view of Kato" (pages 8 and 9 lines 32-1). The Examiner, by using 35 USC 103 over Stern in further view of Kato, does not admit that Stern fails to show a specific limitation of Claim 4. Stern fails to show the specific timing limitation in Claim 5, which is more limiting than what is recited in Claim 4. To this end, Kato is needed to show the additional limitation of a timing mechanism. This assertion of Kato in no way shows that Stern fails to show that successive signals are sent to different districts, as discussed above.

4. Applicant's arguments filed 1/12/04 have been fully considered but they are not persuasive. Applicant argues, "it appears, therefore, that the Examiner's interpretation of an opinion of the teachings of Stern et al are inconsistent and that the Examiner's cites of the teaching so Stern are in mutual contradiction" (page 10 lines 1-3). Examiner apologizes about the confusion regarding the inconsistency of the interpretation. After closer inspection, during After Final examination (after the action sent out on 6/09/03 paper #8), the Examiner found additional information in the specification to meet the limitations of Claim 4 that was previously overlooked in paper #8. This is reason for the 2<sup>nd</sup> Final Rejection.
5. Applicant's arguments filed 1/12/04 have been fully considered but they are not persuasive. Applicant argues, "First, Kato et al has no concept or teachings of district taps or district power supplies or a of the avoidance of sequential commands to a single district to prevent overloading of the power supply..." (page 12 lines 4-20). Kato is not used to teach district taps, district power supplies, or sequential commands. Kato is merely used to teach using an operation time between command signals. All other limitations, as discussed above, are taught by Stern. Stern shows that commands to the individual power units (fig. 1 a item 2) are sent down serially, or successively. This means that successive commands are sent to different districts. After the command is received by the power unit, the commands to the individual taps are sent down in parallel (col. 6 lines 1-21). Since not specifically stated, Stern does not need to mention power consumption, only that the signals are transmitted to different districts for any reason.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stern et al.

Regarding Claim 4, Stern shows a cable broadcasting system comprising a center equipment for transmitting broadcast signals on a transmission line, and a controller for transmitting command signals for controlling distribution of the broadcast signals to broadcast signal receiving terminals (col. 4 lines 60-68, col. 5 lines 1-14, see figure 1a 'head end control', 'encoder', 'RF tv program signal source), and at least one receiving district, each receiving district including a plurality of tap devices connected from the transmission line for distributing the broadcast signals from the transmission line to the broadcast signal receiving terminals (col. 5 lines 20-28, 45-48, 60-63, see fig. 1a items 2 and 3), and a district power supply connected from a power source and providing a power signal through the transmission line to the tap devices of the receiving district (col. 5 lines 20-28, see fig. 1a item 2 'power unit'). Stern further shows that each tap device includes at least one switchable path for distributing the broadcast signal (col. 5 lines 28-32, see fig. 1a items 40a-c), at least one control relay in each tap path for controlling connection of the tap path to the broadcast signal receiving terminal (col. 5 lines 28-32, see fig. 1a

items 40a-c), a tap control connected from the transmission line and responsive to the command signals for controlling the relays (see fig. 1a item 35 'tap logic'), and a tap device power supply connected from the power signal on the transmission line and providing power to the tap (see fig. 1a item 120 'power supply'). Stern shows that the center equipment controller sends commands to the power unit, which denotes a distinct district, serially, or successively (col. 6 lines 12-17). This shows that separate, or successive, commands can be sent to different districts, or power units, then the following control signals are sent to the district tap units. Also, Stern shows that the center equipment transmits a command signal to a receiving district having at least one tap device to which a command signal is to be transmitted (col. 3 lines 5-30) and transmits a command signal to a receiving district which has not received a command signal in a proceeding transmission (col. 6 lines 1-21). Stern shows serial, or successive, communication between districts. This denotes sending a signal to a district which has not received one in previous transmission. Stern fails to show repeating a transmission to a district. Official Notice is given that it is well known and expected in the art to repeat a command transmission. This allows for error correction and ensures that a signal was received at the destination. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Stern with the ability to repeat a signal to ensure that a signal was received at the destination.

Regarding Claim 6, Stern further shows a directional coupler connected from the transmission line for branching connection of the broadcast signal from the transmission line to each of the tap paths (col. 7 lines 48-61, see fig. 1a 'directional tap'). Stern also

shows at least one control relay on each tap path is controllable through the tap control and by command signals to switchably connect the tap path into one of an on state and an off state (col. 2 lines 43-58, col. 3 lines 50-65, col. 5 lines 27-3265-67, see figure 1a items 35 'tap logic' and 40a-c).

Regarding Claim 7, Stern shows a plurality of switchable tap paths (see fig. 1a 'directional tap' and items 40a-c). Stern further shows a directional coupler connected from the transmission line for branching connection of the broadcast signal from the transmission line to each of the tap paths (col. 7 lines 48-61, see fig. 1a 'directional tap'). Stern also shows at least one control relay on each tap path is controllable through the tap control and by command signals to switchably connect the tap path into one of an on state and an off state (col. 2 lines 43-58, col. 3 lines 50-65, col. 5 lines 27-3265-67, see figure 1a items 35 'tap logic' and 40a-c). Finally, Stern shows the tap control controls the control relays of a plurality of tap paths of a tap device, the tap control controls each control relay to switchably connect each tap path into one of an on state and an off state (col. 2 lines 43-58, col. 3 lines 15-30, col. 4 lines 60-67, see fig. 1a item 35 'tap logic').

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stern et al in further view of Kato et al.

Regarding Claim 5, Stern fails to show that a command signal will be sent to a tap device in the receiving district only after an operating time required for the tap device in the receiving district to complete execution of the preceding command has elapsed. Kato shows the ability of a command sequence to wait an elapsed time to ensure that the preceding command instruction has executed before executing the next command (col. 28



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lines 1-21, col. 29 lines 35-62). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Stern with the command signal waiting time of Kato so that another command signal was not sent to the same time, possibly damaging the electronics of the tap.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R Nalevanko whose telephone number is 703-305-8093. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 703-305-4380. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Christopher Nalevanko  
703-305-8093  
AU 2611

cn  
February 23, 2004

  
HAITRAN  
PATENT EXAMINER